

L Number	Hits	Search Text	DB	Time stamp
104	3264	simmons-\$in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:16
110	10	klimowski-\$in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:16
116	1212	reilly-\$in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:16
122	55	yansura-\$in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:17
128	3	simmons-\$in. and klimowski-\$in. and reilly-\$in. and yansura-\$in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:18
134	4521	simmons-\$in. or klimowski-\$in. or reilly-\$in. or yansura-\$in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:18
140	66	(simmons-\$in. or klimowski-\$in. or reilly-\$in. or yansura-\$in. ) and (fab or immunoglobulin or igg)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:19
146	8	(simmons-\$in. or klimowski-\$in. or reilly-\$in. or yansura-\$in. ) and ((fab or immunoglobulin or igg) with (prokaryot\$4 or coli or bacteri\$4))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:22
152	1406	(express\$4 or produc\$5) with ((fab or immunoglobulin or igg) with (prokaryot\$4 or coli or bacteri\$4))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:31
158	23	((express\$4 or produc\$5) with ((fab or immunoglobulin or igg) with (prokaryot\$4 or coli or bacteri\$4))) .clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:29
164	5	((second or multiple) adj2 cistron\$1) same ((express\$4 or produc\$5) with ((fab or immunoglobulin or igg) with (prokaryot\$4 or coli or bacteri\$4)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:30
170	112	(express\$4 or produc\$5) with ((fab or immunoglobulin or igg) with (prokaryot\$4 or coli or bacteri\$4)) with (construct or plasmid)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:33
176	12	(express\$4 or produc\$5) with ((fab or immunoglobulin or igg) with (prokaryot\$4 or coli or bacteri\$4)) with (construct or plasmid) with (one or single)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/16 09:33

(FILE 'HOME' ENTERED AT 10:01:27 ON 16 JUN 2003)

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 10:01:40 ON 16 JUN 2003

L1 23600 S (SIMMONS, ?)/IN,AU  
L2 56 S (KLIMOWSKI, ?)/IN,AU  
L3 13581 S (REILLY, ?)/IN,AU  
L4 191 S (YANSURA, ?)/IN,AU  
L5 5 S L1 AND L2 AND L3 AND L4  
L6 2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)  
L7 37355 S L1 OR L2 OR L3 OR L4  
L8 534 S L7 AND (IMMUNOGLOBULIN OR ((HEAVY OR LIGHT) (2W) CHAIN) OR F  
L9 75 S L8 AND (COLI OR PROKARYOT? OR BACTERI?)  
L10 0 S L9 AND MONOCISTRONIC  
L11 1 S L9 AND ((MULTIPLE OR TWO) (S) CISTRON?)  
L12 8325 S DI-CISTRON? OR DICISTRON? OR BI-CISTRON? OR BICISTRON? OR POL  
L13 1 S L12 AND L8  
L14 650794 S (IMMUNOGLOBULIN OR ((HEAVY OR LIGHT) (2W) CHAIN) OR FAB)  
L15 58586 S L14 AND (COLI OR PROKARYOT? OR BACTERI?)  
L16 1 S L4 AND ((MULTIPLE OR TWO) (S) CISTRON?)  
L17 64 S L15 AND L12  
L18 25 DUPLICATE REMOVE L17 (39 DUPLICATES REMOVED)

ACCESSION NUMBER: 93004338 MEDLINE  
DOCUMENT NUMBER: 93004338 PubMed ID: 1391661  
TITLE: Expression and secretion of an assembled tetrameric  
CH2-deleted antibody in *E. coli*.  
AUTHOR: Lo K M; Roy A; Foley S F; Coll J T; Gillies S D  
CORPORATE SOURCE: Abbott Biotech, Inc., Needham Heights, MA.  
SOURCE: HUMAN ANTIBODIES AND HYBRIDOMAS, (1992 Jul) 3 (3) 123-8.  
Journal code: 9014461. ISSN: 0956-960X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199211  
ENTRY DATE: Entered STN: 19930122  
Last Updated on STN: 19930122  
Entered Medline: 19921120

AB We have expressed in *E. coli* a functional assembled antibody variant that is secreted into the media. The antibody variant is a CH2-deleted chimeric antibody 14.18, which was previously shown to be a potentially useful reagent for radioimmunoassay of human tumors. The **bacterial** expression vector contains a **dicistronic** unit comprised of a L-chain cDNA and a CH2-deleted H-chain cDNA. For translocation across the **bacterial** membranes, we have replaced the natural signal peptides of the H and L chains with the signal peptide of the **bacterial** protein pectate lyase B. When expressed in the JM105 host under the control of the trp-lac promoter, the products were secreted into the M9 growth media to about 350 micrograms/L. The secreted antibody, which can be readily purified from the media without any denaturation or renaturation steps, retains antigen-binding activity. SDS-PAGE and nondenaturing size exclusion high-pressure liquid chromatography showed that it is a mixture of assembled HL and fully assembled H2L2. In H2L2, inter-H chain disulfide bonds are not formed, and the two HL half-molecules are likely held together by the trans interaction between the two CH3 domains.